

VISION SENSOR BIS510





VISION SENSOR BIS510 FOR SHEET VERIFICATION

A page missing out of a novel is annoying, and a page printed upside down in a book of prized photos is inconvenient. But neither case is as potentially perilous as a mix-up of package inserts for drugs. Because some print projects are more critical than others, the correct page or sheet must be reliably identified prior to assembly into the finished product.

Pepperl+Fuchs, a leading developer and manufacturer of electronic sensors and components for the global automation market has partnered with Optigraf, the new benchmark in optical quality control, to provide industrial vision systems that are reliable, efficient, and easy to operate.

GOOD

THE SOLUTION: VISION SENSOR BIS510 – NO. 1 FOR SHEET VERIFICATION

BIS510 verifies the correctness of sheets by image comparison or code matching.

PRODUCT FEATURES

- Verifies the correctness of sheets e.g., in collating and folding machines with image comparison or Barcode/Data Matrix code matching
- Automatic Teach-In of reference image
- Permanent storage of reference image
- Connection of a trigger sensor (ML4.2)
- Error image memory for fast technical support
- Ethernet Interface for fast image and data communication
- Simple integration in graphical user interfaces
- Free PC software for easy setup and starting



PEPPEEL+FOCHS - FOUR COMPETENT PA



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VISION SENSOR BIS510 – HIGHLIGHTS



AUTOMATIC TEACH-IN

Automatic Teach-In of reference sheet reduces operator workload and changeover time

REDUCED INSTALLATION REQUIREMENTS

Image and code matching in one sensor reduces installation requirements

HIGH READING SPEED

■ Up to 4 m/s with 10 sheets/s

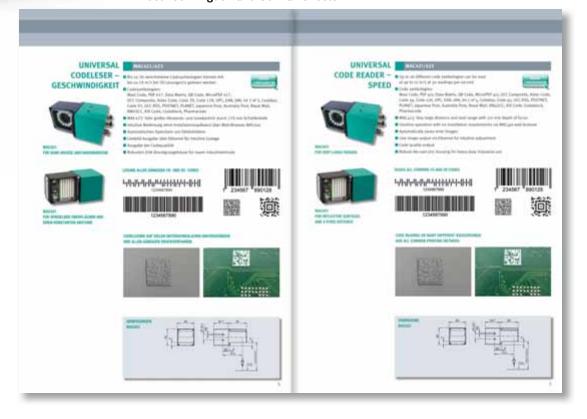
RELIABLE ON REFLECTIVE SURFACES

 Optimal illumination ensures reliable detection even on reflective surfaces

NO DIRECTION REQUIREMENTS

 Reads Barcodes vertically as well as horizontally and Data Matrix codes omnidirectionally

Can even detect the difference between English and German sheets



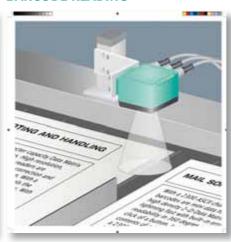
VISION SENSOR BIS510 – APPLICATIONS

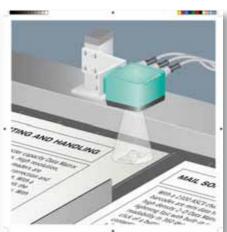
IMAGE COMPARISON



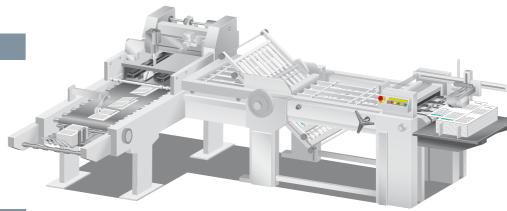
DATA MATRIX READING







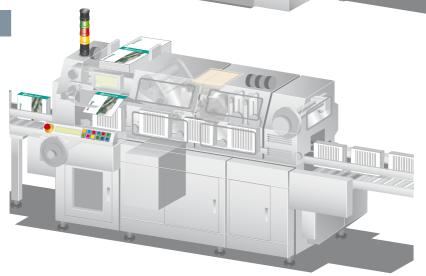
FOLDING MACHINE



COLLATING MACHINE



BINDING MACHINE



TECHNICAL INFORMATION

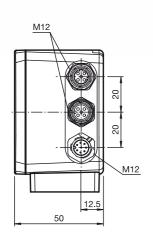


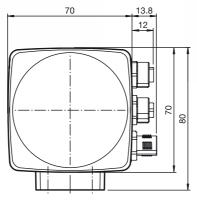
TECHNICAL DATA BIS510

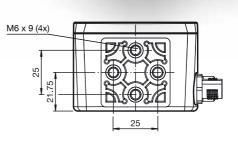
Image field	Minimum 75 x 45 mm ²
Operating distance	60 mm
Tolerance area	> ±10 mm (X,Y)
	> ±6 mm (Z) 5° Torsion
Surface curvature	Radius > 100 mm
Sheet speed	< 4 m/s
Workability time	< 100 ms
Resolution	0.1 mm/pixel
Code-Symbologies	2/5 interleaved, Code39, EAN128, EAN13, Data Matrix (optional)
Sensor type	752 x 480 monochrom
Illumination	Flashing white light LEDs
Connectors	8-pin, M12x1 connector, standard (supply+IO) 5-pin, M12x1 socket, standard (IO)
	4-pin, M12x1 socket, standard (LAN)
Protection class	IP65, dust-resistant
Ambient temperature	-0 °C 45 °C
Storage temperature	-20 °C 60 °C



DIMENSIONS (mm)







Several variants of plug orientations are available to guarantee an easy integration.

Model number	Description
ML4.2-xxxx	Trigger sensor
V19-G-ABG-PG9	Field attachable female cordset
V19-G-2M-ABG	Connecting cable 2 m
V19-G-5M-ABG	Connecting cable 5 m
V1S-G	Micro DC Field Attachable Connector - Male straight connector
V1SD-G-2M-PUR-ABG-V45X-G	Network cable 2 m







Contact

Pepperl+Fuchs GmbH Lilienthalstraße 200 68307 Mannheim · Germany Tel. +49 621 776-4411 · Fax +49 621 776-27-4411 E-mail: fa-info@pepperl-fuchs.com

Worldwide Headquarters

Pepperl+Fuchs GmbH · Mannheim · Germany E-mail: fa-info@pepperl-fuchs.com

USA Headquarters

Pepperl+Fuchs Inc. · Twinsburg, OH · USA E-mail: fa-info@us.pepperl-fuchs.com

Asia Pacific Headquarters

Pepperl+Fuchs Pte Ltd · Singapore Company Registration No. 199003130E E-mail: fa-info@sg.pepperl-fuchs.com



www.pepperl-fuchs.com